QC ABSTRACT

NAME OF WORK: Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.

SL NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
4	Brick	Compressive Strength	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		EFFLORESCENCE	One Test		1	1
		DIMENSIONS AND TOLERANCES	One Test		1	1
5	PCC(M15)	Compressive Strength(7days and 28days)	1 set /1-5 cum		2	2
6	Mortar Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		Compacted Bulk Density	One Test		1	1
		Loose Bulk Density	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1
7	Plaster Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1

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TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2022-12-30-34** **Date: 13-06-22**
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP,
Address	:	Shettyhalli Sub Division, BBMP, Bangalore
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/WO/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	10-06-22
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 (Part 1,2 3,4,5, 6,11) 1988 IS 4031 Part 1 (RA 2021) DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, (RA 2018) Determination of Fineness by Blaine Air Permeability Method, Clause 5 IS 4031 Part 3, (RA 2019) Determination of Soundness, Clause 5, Clause 6 IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, (RA 2019) Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11, (RA 2019)DETERMINATION OF DENSITY , Clause 6
Date of test	:	11-06-22
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	2.2	–
2	Finess by Air permeablity method (m^2/kg.Min)	284.5	225m^2/kg. Min
3	Density (gm/cc)	3.15	–
4	Standard Consistency (%)	28.5	Not specified
5	Initial Setting time	180 minutes	Not less than 30 minutes
6	Final Setting time	260 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.0mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

Note:

The results pertain to the samples received and tested

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Quality Manager

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TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	CP-2022-12-30-34 **Date: 09-07-22**
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/W.O/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	10-06-22
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, (RA 2019) Determination of Compressive Strength, Clause 6
Date of test	:	11-06-22
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Compressive Strength

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	29.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.5N/mm^2	Not less than 37 N/mm^2
3	28 Days	56.0N/mm^2	Not less than 53 N/mm^2

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Quality Manager

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TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2022-12-30-34** **Date: 13-06-22**
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/W.O/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample condition	:	Satisfactory
Date of Receipt	:	10-06-22
Sample Type	:	40mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	10-06-22

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : **15000** **grams**

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	215	215	1.4	98.6	90-100
3	20 mm	7455	7670	51.1	48.9	30-70
4	10 mm	4266	11936	79.6	20.4	10-35
5	4.75 mm	2844	14780	98.5	1.5	0-5
6	Pan	220	15000	100.0	0	---

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TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2022-12-30-34** **Date: 13-06-22**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	11.9	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.3	
3	Specific Gravity	2.64	_
4	Bulk Density(Loose) (Kg/l)	1.41	_
5	Bulk Density(Compacted) (Kg/l)	1.47	_
6	Water Absorption(%)	0.23	_

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2022-12-30-34** **Date: 13-06-22**
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer Reference	:	EE/DD/W.O/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	10-06-22
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	10-06-22

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : **5000** **grams**

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	298	298	6.0	94.0	90-100
3	10 mm	2645	2943	58.9	41.1	25-55
4	4.75 mm	1811	4754	95.1	4.9	0-10
5	Pan	246	5000	100	0	-

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TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2022-12-30-34 **Date: 13-06-22**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	8.9	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	11.4	
3	Specific Gravity	2.62	–
4	Bulk Density(Loose) (Kg/l)	1.42	–
5	Bulk Density(Compacted) (Kg/l)	1.48	–
6	Water Absorption(%)	0.35	–
7	Aggregate crushing Value(%)	24.8	Max 30% for Aggregates to be used in concrete for wearing Surface. In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	25.1	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

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TEST REPORT OF FINE AGGREGATE

Date: 13-06-22

Lab ID	:	CP-2022-12-30-34
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/W.O/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	10-06-22
Sample Type	:	Fine Aggregate
Reference to BIS codes	:	IS 383 : 2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1, 3) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
Date of test	:	10-06-22
Total weight taken	:	1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	26	26	2.6	97.4	90-100	90-100	90-100	95-100
3	2.36 mm	58	84	8.4	91.6	60-95	75-100	85-100	95-100
4	1.18 mm	237	321	32.1	67.9	30-70	55-90	75-100	90-100
5	600 micron	206	527	52.7	47.3	15-34	35-59	60-79	80-100
6	300 micron	205	732	73.2	26.8	5-20	8-30	12-40	15-50
7	150 micron	192	924	92.4	7.6	0-10	0-10	0-10	0-15
8	Pan	76	1000	100.0	0.0	---	---	---	---
Result :The tested Sample Conforms to Grading Zone II									

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TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2022-12-30-34 **Date: 13-06-22**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	2.1	_
2	Specific Gravity	2.56	_
3	Material finer than 75 micron(%)	7.6	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT OF PHYSICAL REQUIREMENTS OF BRICKS

Lab ID	:	CP-2022-12-30-34 **Date: 25-06-22**
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/W.O/84/2021-22
Source of sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	20-06-22
Identification Mark on Brick	:	SLV Brand Brick
Reference to BIS codes	:	IS 1077 : 1992 (RA 2021) Common Burnt Clay Building Bricks-Specification IS 3495 (Part 1 to 3) : 1992(RA 2019) Method of Tests Burnt Clay Building Bricks Part 1:Determination of Compressive Strength, (Cl 4.2.3) Part 2:Determination of Water Absorption,(Cl 4.1.3) Part 3: Determination of Efflorescence, (Cl 4)
Date of test	:	20-06-22

COMPRESSIVE STRENGTH

Sl.No.	Length (mm)	Breadth (mm)	Area (mm^2)	Failure Load (KN)	Compressive strength of individual bricks (N/mm^2)	Acceptablity as per IS 1077:1992, Clause 7.1
1	227.20	109.98	24987	142.2	5.7	The bricks shall have a minimum average compressive strength for various classes as given in Table 1 of IS 1077: 1992. The compressive strength of any individual bricks shall not fall below the minimum compressive strength specified for the corresponding class of brick by more than 15%.
2	226.88	109.72	24893	132.2	5.3	
3	232.84	107.89	25121	126.9	5.1	
4	230.51	106.64	24582	141.7	5.8	
5	228.16	107.98	24637	135.6	5.5	
Average of 5 bricks					5.5	

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Lab ID : CP-2022-12-30-34 Date: 25-06-22

WATER ABSORPTION:

Sl.No.	Dry Weight	Wet Weight	Water Absorption(%)	Acceptablity as per IS 1077:1992, Clause 7.2
1	2.976	3.265	9.7	The water Absorption of bricks shall not be more than 20% by weight upto class 12.5 and 15% by weight for higher classes.
2	2.868	3.176	10.7	
3	2.906	3.196	10.0	
4	2.955	3.275	10.8	
5	2.865	3.178	10.9	
Average Water Absorption(%)			10.4	

EFFLORESCENCE:

Sl.No.	Length (mm)	Breadth (mm)	Area (mm^2)	Efflorescence	Acceptablity as per IS 1077:1992, Clause 7.3
1	229.18	108.98	24976	Slight	The efflorescence shall not be more than 'moderate" upto class 12.5 and "slight" for higer classes.
2	228.98	109.18	25000	Moderate	
3	228.18	108.39	24732	Moderate	
4	230.19	107.98	24856	Moderate	
5	228.13	109.19	24910	Moderate	

DIMENSIONS AND TOLERANCES

Sl.No.	Dimensions obtained for 20 bricks(mm)		Acceptability as per IS 1077:1992, Clause 6.2(b)
1	Length	4570	4520 to 4680 mm
2	Width	2195	2160 to 2240 mm
3	Height	1385	1360 to 1440 mm

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TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-12-30-34

Date: 27/06/2022

Customer : Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.

Address : Shettyhalli Sub Division, BBMP, Bangalore.

Project Name : Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division

Agency : M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086

Customer's Reference : EE/DD/W.O/84/2021-22

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 22-06-22

Customer ID : PCC

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M15 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 27/06/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen	Cross sectional area	Weight of the sample	Failure Load	Compressive strength	Average Compressive Strength
					(mm)	(Sq.mm)	(kg)	(KN)	(N/mm^2)	(N/mm^2)
1	PCC	M15	20/06/2022	27/06/2022	149.41 X 151.56 X 149.02	22645	8.785	282.6	12.5	12.5
2	PCC	M15	20/06/2022	27/06/2022	151.40 X 151.49 X 151.68	22935	9.044	293.0	12.8	
3	PCC	M15	20/06/2022	27/06/2022	150.72 X 150.62 X 150.27	22701	8.224	278.3	12.3	

* The results obtained are satisfactory as per standard requirements.

Note:

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 18/07/2022

Lab ID	:	CP-2022-12-30-34
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/W.O/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	22-06-22
Customer ID	:	PCC
Sample Type /Size	:	150X150X150 mm
Sample grade/Age	:	M15 / 28 Days Compressive Strength
Reference to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5
Date of test	:	18/07/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	PCC	M15	20/06/2022	18/07/2022	149.88 X 151.65 X 151.30	22729	8.998	405.4	17.8	17.4
2	PCC	M15	20/06/2022	18/07/2022	150.30 X 150.28 X 149.83	22588	8.718	391.4	17.3	
3	PCC	M15	20/06/2022	18/07/2022	150.74 X 151.31 X 149.63	22809	8.816	388.8	17.0	

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Format No: CP/TF/2017

TEST REPORT FOR SAND MASONRY MORTARS

Lab ID	:	**CP-2022-12-30-34** **Date: 17-06-22**
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/W.O/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	14-06-22
Sample Type	:	Fine Aggregate, M.Sand for Mortar
Reference to BIS codes	:	IS 383 : 2016 (Specification for Coarse and fine Aggregates) IS: 2116-1980 (RA-2007) (Specification for Sand for Masonry Mortars) IS: 2386 :1963(Part - 1, 3) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
Date of test	:	14-06-22
Total weight taken	:	1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS: 2116-1980 (RA-2007)
1	4.75 mm	0	0	0	100	100
2	2.36 mm	79	79	7.9	92.1	90-100
3	1.18 mm	95	174	17.4	82.6	70-100
4	600 micron	166	340	34.0	66.0	40-100
5	300 micron	120.5	460.5	46.1	54.0	5-70
6	150 micron	429.5	890	89.0	11.0	0-15
7	Pan	110	1000	100.0	0.0	0

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TEST REPORT FOR SAND MASONRY MORTARS

Lab ID : CP-2022-12-30-34 **Date: 17-06-22**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	3.18	–
2	Specific Gravity	2.53	–
3	Material finer than 75 micron(%)	11.0	Crushed Fine aggregate Max 15%
4	Compacted Bulk Density (Kg/litre)	1.90	–
5	Loose Bulk Density (Kg/litre)	1.75	–

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TEST REPORT FOR PLASTER SAND

Lab ID	:	CP-2022-12-30-34 **Date: 18-06-22**
Customer	:	Assistant Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
Address	:	Shettyhalli Sub Division, BBMP, Bangalore.
Project Name	:	Maintainanace and repairs of UGD and desilting of drains in silt and tractors in ward No. 12 Shettyhalli, Shettyhalli Sub division.
Agency	:	M/s. Mahendra Engineering Works, #243, 15th D Cross, 2nd Stage, 2nd Phase, WOC, Mahalakshmipuram, Bangalore-560086
Customer's Reference	:	EE/DD/W.O/84/2021-22
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	15-06-22
Sample Type	:	Plaster Sand
Reference to BIS codes	:	IS: 383 : 2016 (Specification for Coarse and fine Aggregates) IS1542:1992 (RA 2019) (Sand for Plaster - Specification) IS: 2386 :1963(Part - 1, 3) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
Date of test	:	15-06-22
Total weight taken	:	1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 1542:1992
1	10 mm	0	0	0	100	100
2	4.75 mm	24	24	2.4	97.6	95-100
3	2.36 mm	15	39	3.9	96.1	95-100
4	1.18 mm	41	80	8	92.0	90-100
5	600 micron	87	167	16.7	83.3	80-100
6	300 micron	198	365	36.5	63.5	20-65
7	150 micron	550	915	91.5	8.5	0-15
8	Pan	85	1000	100	0	---

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TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2022-12-30-34

Date: 18-06-22

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.8	–
2	Specific Gravity	2.56	–
3	Material finer than 75 micron(%)	8.5	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

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